Broadening narrow money: monetary policy with a central bank digital currency

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Extended Abstract

At its heart, the concept of a central bank digital currency is a simple one; electronic access to narrow, or central bank, money. Such a central bank liability already exists in the form of reserves, but in most cases these remain the preserve of a limited section of the economy, accessible only by select financial institutions. Other parts of the economy can access central bank money through holding physical notes, but these are cumbersome for transactions, involve significant storage costs and, unlike their electronic alternative, do not pay a rate of interest.

In reality then, what most commentators mean when they refer to a central bank digital currency is the widening of access to this electronic central bank liability beyond the banking sector.

A nascent literature has begun to develop looking at the issues that would surround such an innovation, ranging from the technological developments that would facilitate it, the impact on the structure and business models of commercial banks, and the implications for payments systems.[4] However, perhaps surprisingly, very little work has yet been done on how the existence of a central bank digital currency would affect the ability of monetary policymakers to meet their objectives and guide the real economy.[5] This paper seeks to address this deficiency in the literature by asking two fundamental questions; what would be the menu of instruments available to policymakers in pursuit of a monetary policy objective under a central bank digital currency? And, what impact would their use have on the existing monetary transmission mechanism?

We find that monetary policy could still guide the economy in much the same way as it does currently, using a combination of the quantity of central bank money supplied and the rate of interest paid on central bank money balances held with the central bank. In fact, some elements of the monetary transmission mechanism are likely to be strengthened. For instance, the introduction of an "outside option" for non-banks in how they hold their sight deposit balances should increase the degree of pass-through from a change in the policy rate to other market rates. Similarly, increased competition in credit provision should ensure more complete pass-through of policy rate changes to lending rates. Quantity-based policies, such as quantitative easing, would be more effective when implemented using a CBDC as, among other reasons, they could be effected directly with non-bank participants removing the current need to increase the liquidity of the banking sector. What is more, the ability of banks to lend-on central bank money, in a way they currently cannot lend reserves, gives rise to a potential new channel of monetary transmission that we term the *intermediated funds channe*l. All told, our analysis suggests a CBDC might both strengthen and refine the levers with which monetary policymakers can meet their objectives and guide the real economy.

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[4] See for example BIS (2015), Ketterer and Andrade (2016) and Raskin and Yermack (2016).

[5] Barrdear and Kumhof (2016) go some way to addressing questions of this nature in a large-scale DSGE model, but they approach them from a more macroeconomic perspective than our own work, which focusses on the specific processes of monetary control and transmission.